

Figure 1

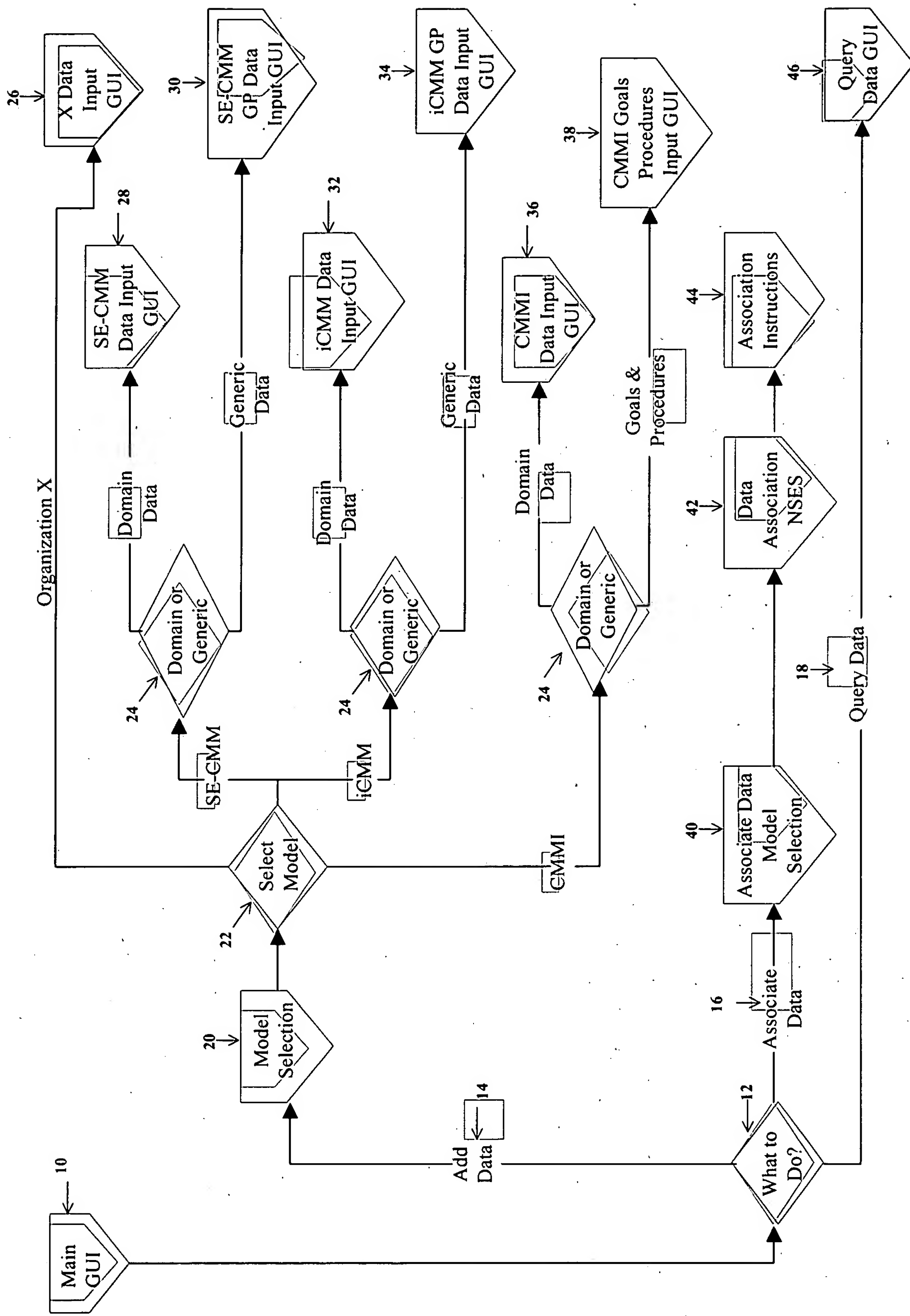
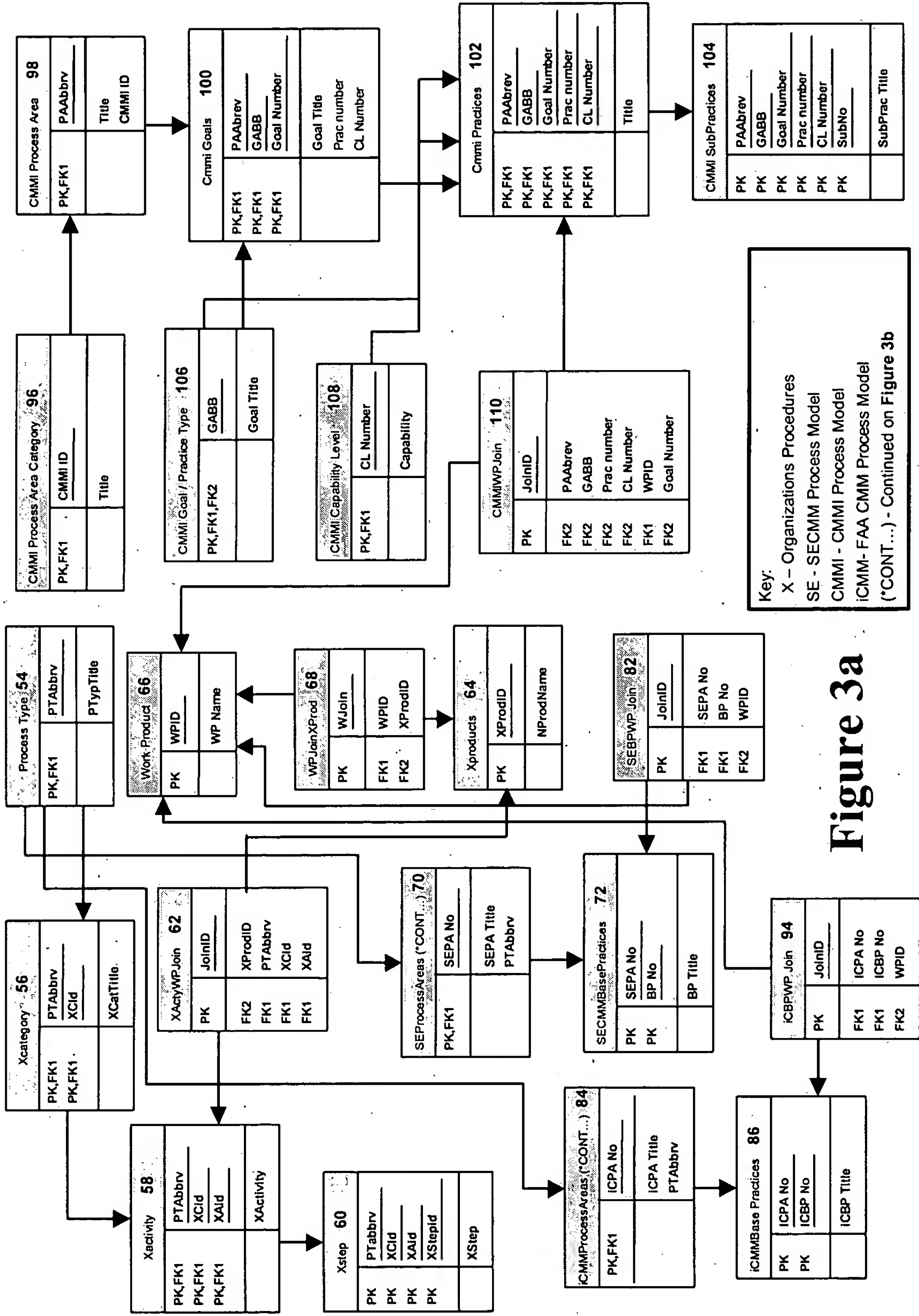
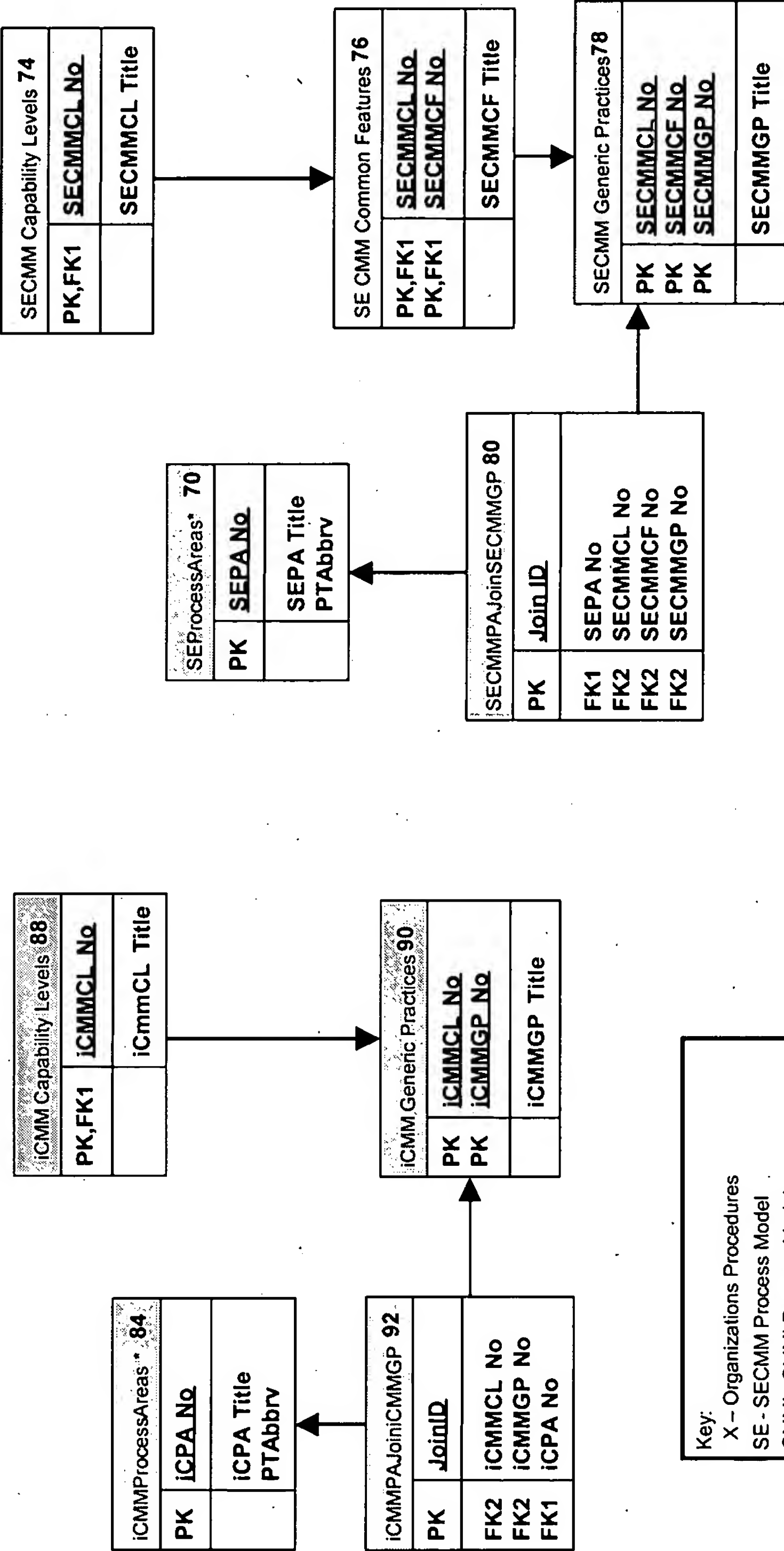


Figure 2

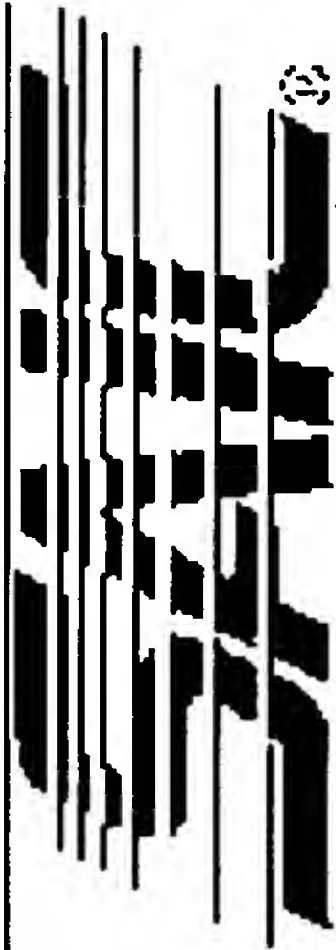




Key:
X - Organizations Procedures
SE - SECMM Process Model
CMMI - CMMI Process Model
iCMM - FAA CMM Process Model
(*CONT...)- Continued on Figure 3b

Figure 3b

Process Model Application Main Menu



An Employee-Owned Company

SAIC Capability Model Tracer

SAIC Capability Model Tracer
Version 1.0 (September 2002)

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Add Data to the Model	Query Data in the Model
Associate Data in the Model	Reports
EXIT the Program	

Figure 4

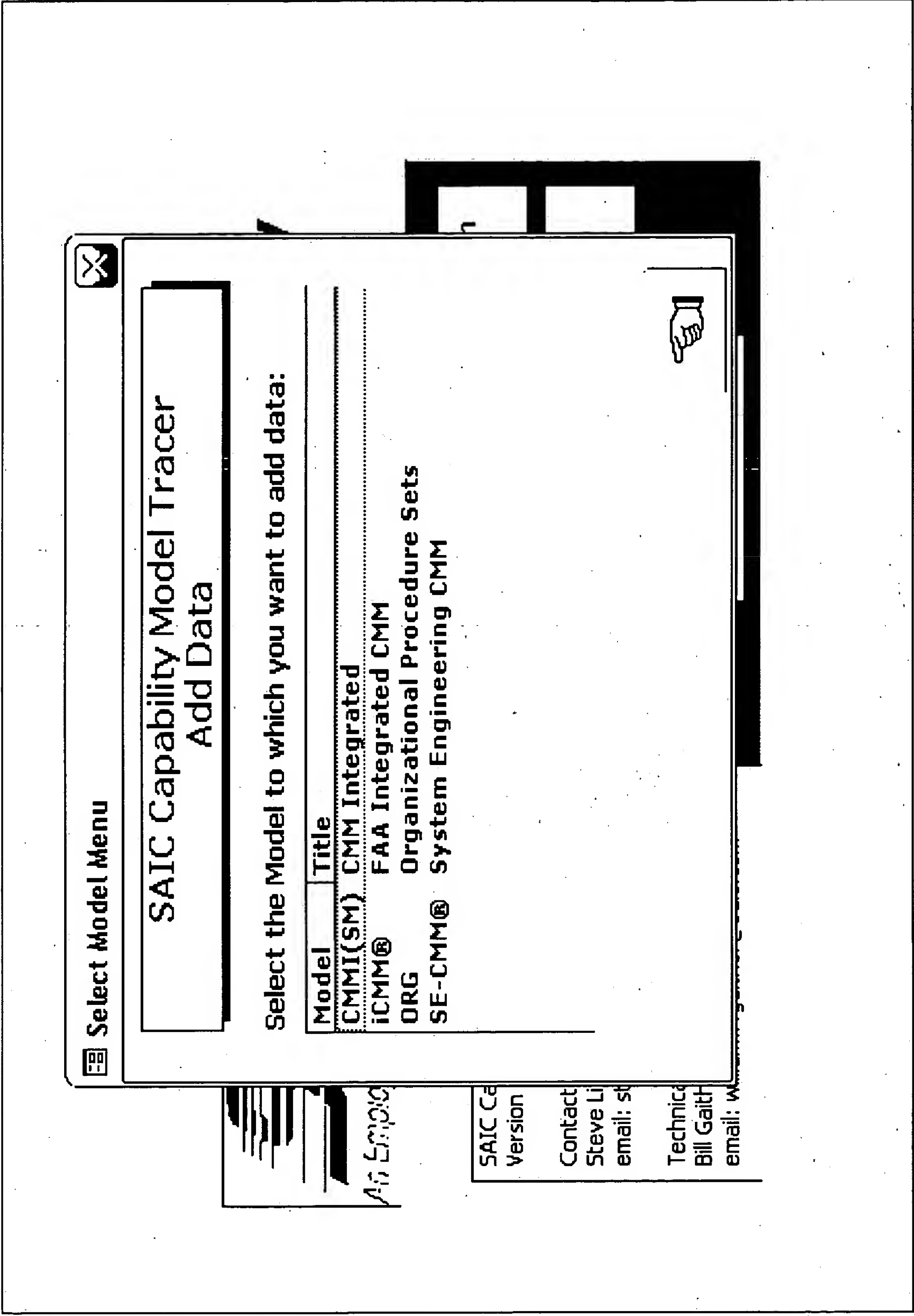


Figure 5

CMMI Add/Edit Data

SAIC Capability Model Tracer

Add/Edit CMMI Data

Select Process Area Category:

E - Engineering

Generic Goals and Practices

Select the Process Area you wish to work with:

PI - Product Integration

CMMI Specific Goals:

Goal Type	Goal Nbr	Goal Title	
SG	1	Prepare for Product Integration	X
SG	2	Ensure Interface Compatibility	X
SG	3	Assemble Products Components and Deliver the Product	X
SG	0		X

CMMI Specific Practices:

Cap Lvl	Prct Nbr	Practice Title	
1	SP	1 Determine Integration Sequence	X
1	SP	2 Establish the Product Integration Environment	X
1	SP	3 Establish Product Integration Procedures and Criteria	X
	SP	0	X

Add/Edit SubPractices

Add/Edit Process Area

Add/Edit Process Area Categories

Figure 6

SAIC Capability Model Tracer

Add/Edit CMMI Data

Select Process Area Category:

E - Engineering

Generic Goals Practices

frm_CMMI_SubPractices : Form

SAIC Capability Model Tracer

Add/Edit CMMI Specific SubPractices

SG 1 - Prepare for Product Integration

SP 1 - Determine Integration Sequence

1.1-1	1	Identify the product components to be integrated	
1.1-1	2	Identify the product integration verifications to be performed using the definition of the interfaces between the product components	
1.1-1	3	Identify alternative product-component integration sequences	
1.1-1	4	Select the best integration sequence	
1.1-1	5	Periodically review the product integration sequence and revise as needed	
1.1-1	6	Record the rationale for decisions made and deferred	

Figure 7

frm_CMMIPProcessAreas : Form		Select Process Area Category:	E - Engineering	Generic Goals and Practices
Add/Edit CMMI Process Areas				
BAR	Casual Analysis and Resolution			
CM	Configuration Management			X
DAR	Decision Analysis and Resolution			X
IPM/IPPD	Integrated Project Management for IPPD			X
ISM	Integrated Supplier Management			X
IT	Integrated Teaming			X
MA	Measurement and Analysis			
OEI	Organizational Environment for Integration			
OID	Organizational Innovation and Deployment			
OPD	Organizational Process Definition			X
OPF	Organizational Process Focus			X
OPP	Organizational Process Performance			X
OT	Organizational Training			X
PI	Product Integration			

Figure 8

Add/Edit SE-CMM Domain Practices

iCMM® Domain Practices

Add/Edit Data

Select Process Type: LEP - Lifecycle or Engineering Procedure

Generic Practices

Process Area

PA	01	Needs	XX
PA	02	Requirements	XX
PA	03	Architectures	XX
PA	04	Alternatives	XX
PA	05	Outsourcing	XX
PA	06	Software Development and Maintenance	XX

Base Practices

BP 01.	01	Elicit Needs	XX
BP 01.	02	Analyze Needs	XX
BP 01.	03	Develop System Requirements	XX
BP 01.	04	Obtain Customer Agreement	XX
BP 01.	05	Inform Customer	XX

Figure 10

SE-CMM Add/Edit Data

iCMM Generic Practices Add/Edit Data

Select Capability Level: - Repeatable: Planned and Tracked

iCMM Generic Practices

- Establish policy
- Allocate adequate resources
- Assign responsibilities
- Ensure training
- Document the process



Figure 11

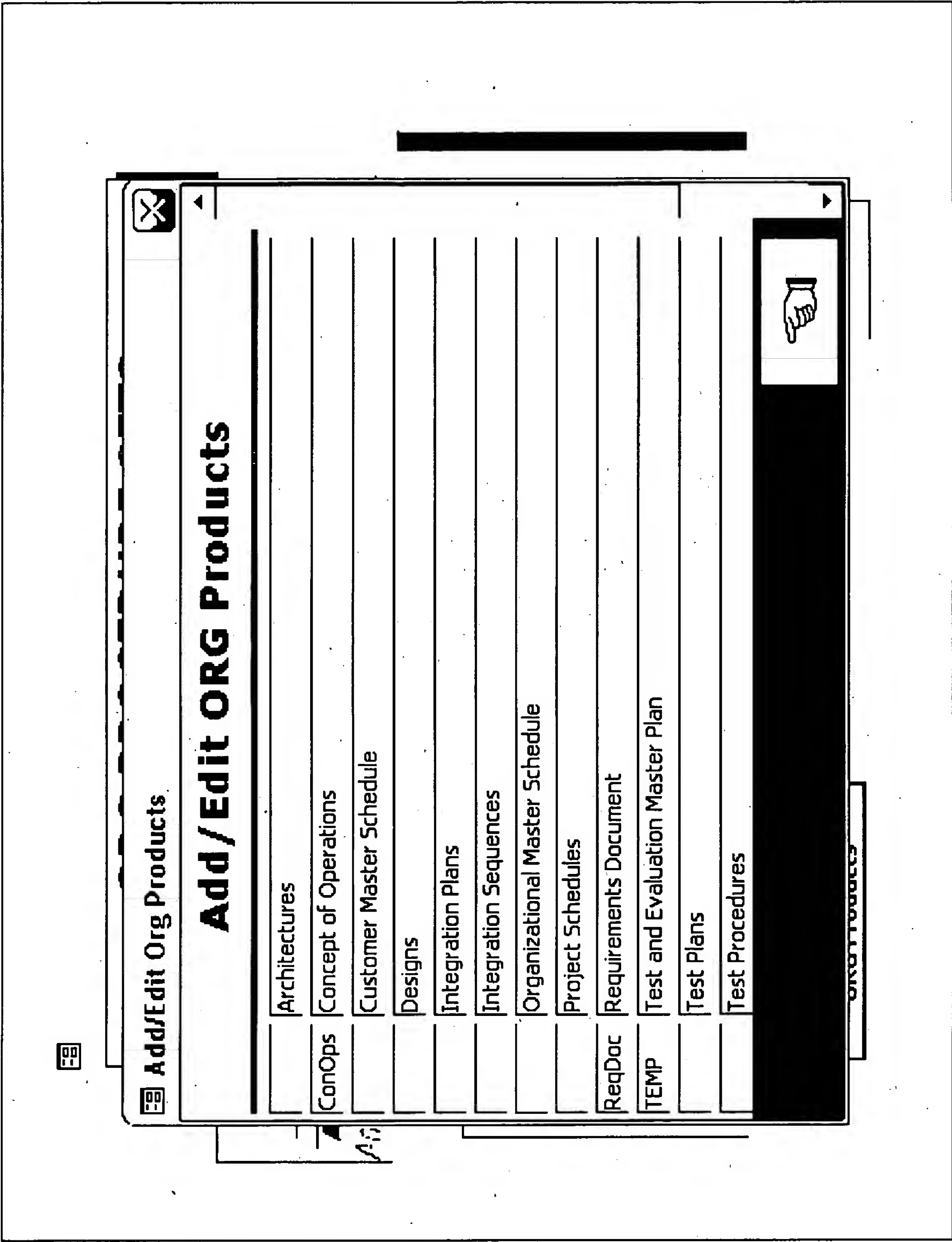


Figure 13

Add/Edit SE-CMM Domain Practices

SE-CMM® Domain Practices

Add/Edit Data

Generic Practices

Process Area

PA	01	Analyze Candidate Solutions	▶X
PA	02	Derive and Allocate Requirements	▶X
PA	03	Evolve System Architecture	▶X
PA	04	Integrate Disciplines	▶X
PA	05	Integrate System	▶X

Base Practices

BP 01.	01	Establish Evaluation Criteria based on the ide	▶X
BP 01.	02	Define the general approach for the analysis,	▶X
BP 01.	03	Identify Alternatives for Evaluation in addition	▶X
BP 01.	04	Analyze the Competeing Candidate Solutions	▶X
BP 01.	05	Select the Solution that Satisfies the Establis	▶X
BP 01.	06	Capture the Disposition of Each Alternative U	▶X

Figure 14

SE-CMM Add/Edit Data

System Engineering CMM

Generic Practices

Add/Edit Data

Select Capability Level: 1 - Performed Informally

Common Features

1. 1 Base Practices are Performed

..

Generic Practices

1 Perform the process

Figure 15

SE-CMM® Domain Practices

Add/Edit Data

Add/Edit Work Products

Add/Edit Work Products

SEBP 01.01 Establish Evaluation Criteria based on the identified problem and its defined constraints

Enter Work Product Name:

Captured Evaluation Criteria
Defect Data-related Criteria
Trade-Study Criteria

Delete
Associations



Figure 16

10
B
I
U
A

Associate Organizational Products to Work Products

SAIC Capability Model Tracer

Organizational Products To Work Products

Architectures<---->"Best" Architecture/Design Alternative
Architectures<---->Architecture/Design Constraints
Architectures<---->Conceptual Architecture/Design Alternatives
Architectures<---->Designated Architecture Framework
Architectures<---->Detailed Architecture/Design Alternatives
Architectures<---->Newly Developed Architecture/Design/Requirements/CONOPS Documents
Architectures<---->Request for Change (RFC) Documents with Change Pages to Existing Baseline Architectures
Architectures<---->Objective Architecture

Select Model
Enter Key Word:

☐ All
☐ CMMI
☐ iCMM
☒ Org
☐ SeCMM

Organizational Products:

Architectures
Concept of Operations
Customer Master Schedule
Designs
Integration Plans
Integration Sequences
Organizational Master Schedule
Project Schedules
Requirements Document
Test and Evaluation Master Plan
Test Plans
Test Procedures

Associate

Work Products:

Acceptability and evaluation criteria
Action item tracking system
Action Item/Lien List
Action items
Action Items, Liens
Action Items, Liens, and Results
Advantages and disadvantages for each supplier
Analyses, Trade Studies to be Performed
Analysis Plan
Analysis Results
Analysis Results, Models, Trade Studies
Appraisal Data and Results

Delete Association

Add Org Products

Advantages and disadvantages for each supplier

Figure 17

Tracer Display

SAIC Capability Model Tracer

Query The Data

Select The Organizational Product You Wish to Trace

Print Query Results

Concept of Operations

Work Products

Analyses, Trade Studies to be Performed

Architecture/Design Constraints

Concept Briefs

Conceptual Architecture/Design Alternatives

Environmental Interface Requirements

List Key Requirements

Operational Concept

Requirements Databases

Requirements Documents

System Concept

System Requirements

Organizational Activities

ERA 01-Develop Detailed Operations Concepts

ERA 02-Identify Key Requirements Issues

ERA 09-Capture Results and Rationale

ESD 02-Derive Architecture and Design Const

ESD 03-Formulate Conceptual Architecture/De

OPI 04-Identify and Plan Process Improvement

SE-CMM Base Practices

BP 02.01 Develop a detailed operational conc

BP 02.08 Maintain requirements traceability t

BP 02.09 Capture system and other requirem

BP 03.04 Develop the interface requirements

BP 06.02 Analyze the customer's needs and

BP 06.03 Develop a statement of system req

CMMI Practices

RD SP 1.1-1 Develop operational concepts a

RD SP 1.2-1 Define the environment the pro

RD SP 1.3-1 Review operational concepts an

RD SP 1.4-1 Develop a detailed operational

iCMM Base Practices

BP 01.02 Analyze Needs

BP 01.03 Develop System Requirements

BP 02.01 Develop detailed operational concep

BP 02.07 Capture and baseline requirements

BP 03.04 Develop architectural interface requ

ERA 02-Identify Key Requirements Issues

Figure 18

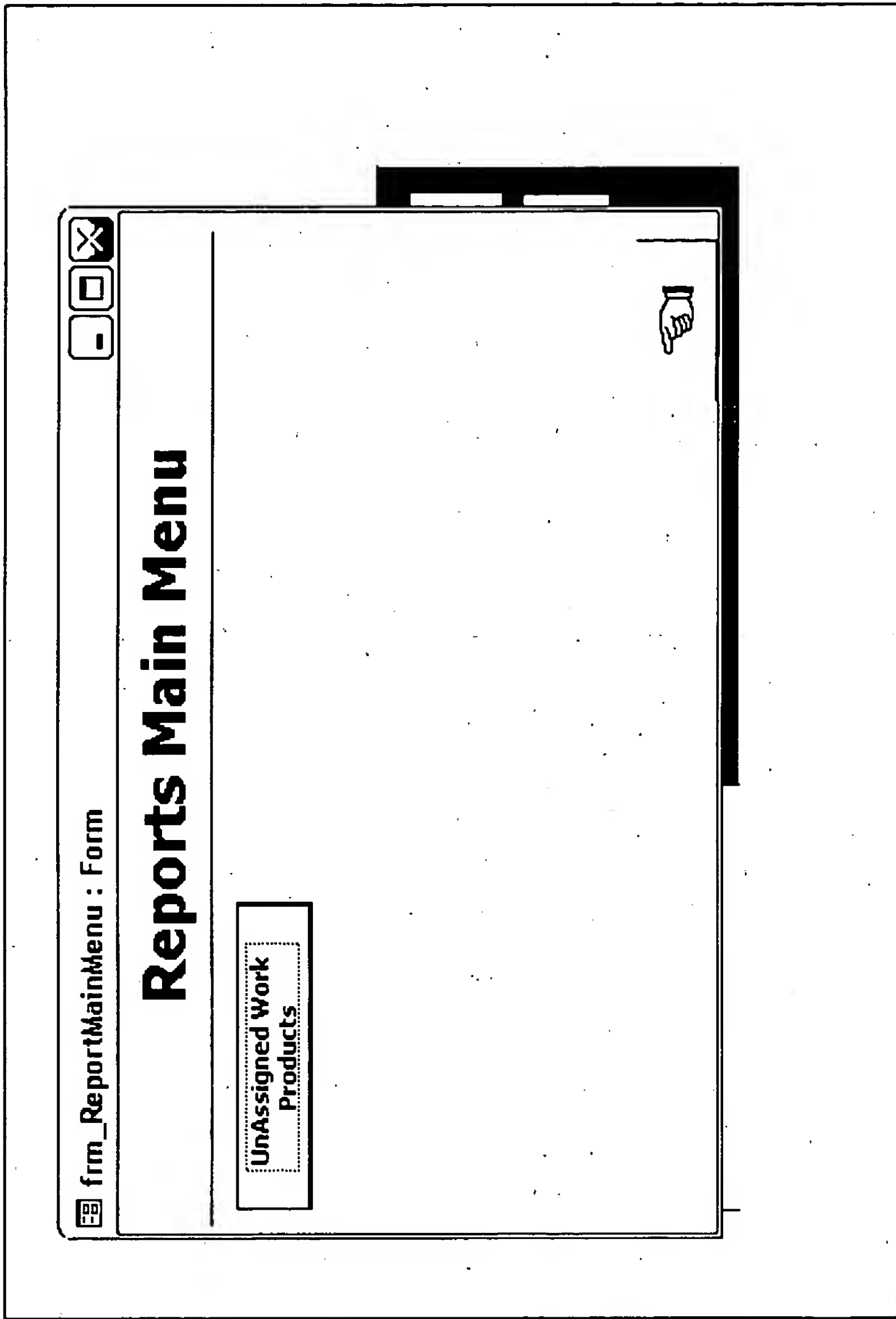


Figure 19

SAIC Capability Model Tracer Unassigned Work Products

The following work products have not been associated with an organizational product:

Also captured integrated items
Acceptance and evaluation criteria
Acceptance Documents
Acceptance documents for the received product components
Acceptance report addressing system element interfaces
Acceptance test procedures
Acceptance test results
Acquisition Program Baseline
Acquisition Strategy
Acquisition Strategy Paper
Action Item list
Action Item list
Action Item tracking system
Action Item/Item list
Action Items
Action Items for updating interfaces
Action Items or recommendations for changes
Action Items tracked to closure
Action Items, Items
Action Items, Items, and Results
Action proposals
Action proposals
Action proposals selected for implementation
Actions resulting from the review
Activity charts
Activity diagrams and use cases
Activity reports
Actual process and product measures collected from the project
Adapted Development Processes
Advantages and disadvantages for each supplier
Advantages and disadvantages of candidate suppliers
Advantages and disadvantages of each supplier
Agendas
Agendas
Agendas and schedules for collaborative activities
Agendas and schedules of collaborative activities
Allocated to other requirements
A kinetic concept is for integrated item structures that include responsibilities, scope, and
Interfaces
A kinetic solution screening criteria

Page: 1

Figure 20